

Ergin Atalar

List of Publications by Year in descending order

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136
papers

7,041
citations

53660

45
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62479

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139
all docs

139
docs citations

139
times ranked

5550
citing authors

#	ARTICLE	IF	CITATIONS
1	A nine-channel transmit/receive array for spine imaging at 10.5 T: Introduction to a nonuniform dielectric substrate antenna. <i>Magnetic Resonance in Medicine</i> , 2022, 87, 2074-2088.	1.9	9
2	Nonlinear droop compensation for current waveforms in MRI gradient systems. <i>Magnetic Resonance in Medicine</i> , 2022, 88, 973-985.	1.9	2
3	A workflow for predicting temperature increase at the electrical contacts of deep brain stimulation electrodes undergoing MRI. <i>Magnetic Resonance in Medicine</i> , 2022, 88, 2311-2325.	1.9	4
4	Accelerating the co-simulation method for the design of transmit array coils for MRI. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2021, 34, 165-178.	1.1	4
5	SNR Weighting for Shear Wave Speed Reconstruction in Tomoelastography. <i>NMR in Biomedicine</i> , 2021, 34, e4413.	1.6	4
6	Eigenmode analysis of the scattering matrix for the design of MRI transmit array coils. <i>Magnetic Resonance in Medicine</i> , 2021, 85, 1727-1741.	1.9	6
7	Analysis and mitigation of noise in simultaneous transmission and reception in MRI. <i>Magnetic Resonance in Medicine</i> , 2021, 86, 1746-1758.	1.9	1
8	Vertical open-bore MRI scanners generate significantly less radiofrequency heating around implanted leads: A study of deep brain stimulation implants in 1.2T OASIS scanners versus 1.5T horizontal systems. <i>Magnetic Resonance in Medicine</i> , 2021, 86, 1560-1572.	1.9	25
9	RF heating of deep brain stimulation implants in open-bore vertical MRI systems: A simulation study with realistic device configurations. <i>Magnetic Resonance in Medicine</i> , 2020, 83, 2284-2292.	1.9	25
10	In vivo human head MRI at 10.5T: A radiofrequency safety study and preliminary imaging results. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 484-496.	1.9	59
11	Wireless control of induced radiofrequency currents in active implantable medical devices during MRI. <i>Magnetic Resonance in Medicine</i> , 2020, 83, 2370-2381.	1.9	6
12	RF heating of deep brain stimulation implants during MRI in 1.2 T vertical scanners versus 1.5 T horizontal systems: A simulation study with realistic lead configurations. , 2020, 2020, 6143-6146.		11
13	Improving radiofrequency power and specific absorption rate management with bumped transmit elements in ultra-high field MRI. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 3485-3493.	1.9	19
14	MR safety watchdog for active catheters: Wireless impedance control with real-time feedback. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 1048-1060.	1.9	14
15	Reconfigurable MRI technology for low-SAR imaging of deep brain stimulation at 3T: Application in bilateral leads, fully-implanted systems, and surgically modified lead trajectories. <i>NeuroImage</i> , 2019, 199, 18-29.	2.1	51
16	Driving mutually coupled gradient array coils in magnetic resonance imaging. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 1187-1198.	1.9	5
17	A gradient array for simultaneous multi-slice excitation with a single-band RF pulse. <i>Magnetic Resonance in Medicine</i> , 2018, 80, 400-412.	1.9	9
18	Wireless deep-subwavelength metamaterial enabling sub-mm resolution magnetic resonance imaging. <i>Sensors and Actuators A: Physical</i> , 2018, 274, 211-219.	2.0	4

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19	A temperature sensor implant for active implantable medical devices for in vivo subacute heating tests under MRI. <i>Magnetic Resonance in Medicine</i> , 2018, 79, 2824-2832.	1.9	21
20	An inductively coupled ultra-thin, flexible, and passive RF resonator for MRI marking and guiding purposes: Clinical feasibility. <i>Magnetic Resonance in Medicine</i> , 2018, 80, 361-370.	1.9	12
21	In vivo MRI with Concurrent Excitation and Acquisition using Automated Active Analog Cancellation. <i>Scientific Reports</i> , 2018, 8, 10631.	1.6	13
22	Simultaneous use of linear and nonlinear gradients for B_1 inhomogeneity correction. <i>NMR in Biomedicine</i> , 2017, 30, e3742.	1.6	2
23	Magnetic Resonance Imaging Assisted by Wireless Passive Implantable Fiducial e-Markers. <i>IEEE Access</i> , 2017, 5, 19693-19702.	2.6	3
24	Modeling of electrodes and implantable pulse generator cases for the analysis of implant tip heating under MR imaging. <i>Medical Physics</i> , 2015, 42, 3922-3931.	1.6	14
25	Active decoupling of RF coils using a transmit array system. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2015, 28, 565-576.	1.1	11
26	Approximate Fourier domain expression for Bloch-Siegert shift. <i>Magnetic Resonance in Medicine</i> , 2015, 73, 117-125.	1.9	2
27	Design of a Gd-DOTA-Phthalocyanine Conjugate Combining MRI Contrast Imaging and Photosensitization Properties as a Potential Molecular Theranostic. <i>Photochemistry and Photobiology</i> , 2014, 90, 1376-1386.	1.3	43
28	Reduction of the radiofrequency heating of metallic devices using a dual-drive birdcage coil. <i>Magnetic Resonance in Medicine</i> , 2013, 69, 845-852.	1.9	51
29	Tracking the Position and Rotational Orientation of a Catheter Using a Transmit Array System. <i>IEEE Transactions on Medical Imaging</i> , 2013, 32, 809-817.	5.4	3
30	Specific absorption rate reduction using nonlinear gradient fields. <i>Magnetic Resonance in Medicine</i> , 2013, 70, 537-546.	1.9	8
31	A Simple Analytical Expression for the Gradient Induced Potential on Active Implants During MRI. <i>IEEE Transactions on Biomedical Engineering</i> , 2012, 59, 2845-2851.	2.5	8
32	Reverse polarized inductive coupling to transmit and receive radiofrequency coil arrays. <i>Magnetic Resonance in Medicine</i> , 2012, 67, 446-456.	1.9	6
33	Peptide functionalized superparamagnetic iron oxide nanoparticles as MRI contrast agents. <i>Journal of Materials Chemistry</i> , 2011, 21, 15157.	6.7	42
34	Modeling of radiofrequency induced currents on lead wires during MR imaging using a modified transmission line method. <i>Medical Physics</i> , 2011, 38, 6623-6632.	1.6	41
35	Recessive LAMC3 mutations cause malformations of occipital cortical development. <i>Nature Genetics</i> , 2011, 43, 590-594.	9.4	102
36	Reduction of implant RF heating through modification of transmit coil electric field. <i>Magnetic Resonance in Medicine</i> , 2011, 65, 1305-1313.	1.9	80

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37	Analytic expressions for the ultimate intrinsic signal-to-noise ratio and ultimate intrinsic specific absorption rate in MRI. <i>Magnetic Resonance in Medicine</i> , 2011, 66, 846-858.	1.9	17
38	Comments on "Ensuring safety of implanted devices under MRI using reversed polarization". <i>Magnetic Resonance in Medicine</i> , 2011, 66, 1515-1516.	1.9	1
39	Homozygosity mapping and targeted genomic sequencing reveal the gene responsible for cerebellar hypoplasia and quadrupedal locomotion in a consanguineous kindred. <i>Genome Research</i> , 2011, 21, 1995-2003.	2.4	62
40	Improving RF safety in MRI by modifying the electric field distribution. , 2011, , .		1
41	Interventional MRI: Tapering improves the distal sensitivity of the loopless antenna. <i>Magnetic Resonance in Medicine</i> , 2010, 63, 797-802.	1.9	9
42	Heating of magnetic fluid systems driven by circularly polarized magnetic field. <i>Journal of Magnetism and Magnetic Materials</i> , 2010, 322, 3053-3059.	1.0	10
43	Design of internal MRI coils using ultimate intrinsic SNR. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2009, 22, 221-228.	1.1	13
44	Focused RF hyperthermia using magnetic fluids. <i>Medical Physics</i> , 2009, 36, 1906-1912.	1.6	69
45	High-resolution MRI of deep-seated atherosclerotic arteries using motexafin gadolinium. <i>Journal of Magnetic Resonance Imaging</i> , 2008, 27, 246-250.	1.9	8
46	Intracoronary MR imaging using a 0.014-inch MR imaging guidewire: Toward MRI-guided coronary interventions. <i>Journal of Magnetic Resonance Imaging</i> , 2008, 28, 515-518.	1.9	16
47	Miniaturized fiber-optic transmission system for MRI signals. <i>Magnetic Resonance in Medicine</i> , 2008, 59, 165-173.	1.9	18
48	Electrical circuit modeling of surface structures for X-ray photoelectron spectroscopic measurements. <i>Surface Science</i> , 2008, 602, 365-368.	0.8	11
49	RF radiometry sensor sensitivity and detection profile. , 2007, , .		1
50	A New RF Radiometer for Absolute Noninvasive Temperature Sensing in Biomedical Applications. , 2007, , .		5
51	A catheter tracking method using reverse polarization for MR-guided interventions. <i>Magnetic Resonance in Medicine</i> , 2007, 58, 1224-1231.	1.9	26
52	Tracking planar orientations of active MRI needles. <i>Journal of Magnetic Resonance Imaging</i> , 2007, 26, 386-391.	1.9	9
53	Measuring local RF heating in MRI: Simulating perfusion in a perfusionless phantom. <i>Journal of Magnetic Resonance Imaging</i> , 2007, 26, 1228-1235.	1.9	16
54	Absolute Temperature Monitoring Using RF Radiometry in the MRI Scanner. <i>IEEE Transactions on Circuits and Systems Part 1: Regular Papers</i> , 2006, 53, 2396-2404.	0.1	14

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55	Evaluation of MR/Fluoroscopyâ€“guided Portosystemic Shunt Creation in a Swine Model. Journal of Vascular and Interventional Radiology, 2006, 17, 1165-1173.	0.2	15
56	Transrectal Prostate Biopsy and Fiducial Marker Placement in a Standard 1.5T Magnetic Resonance Imaging Scanner. Journal of Urology, 2006, 175, 113-120.	0.2	89
57	MRI-guided gene therapy. FEBS Letters, 2006, 580, 2958-2961.	1.3	17
58	A preliminary analysis and model of prostate injection distributions. Prostate, 2006, 66, 344-357.	1.2	20
59	Monitoring and correcting spatio-temporal variations of the MR scannerâ€™s static magnetic field. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2006, 19, 223-236.	1.1	91
60	Real-time MRI guided atrial septal puncture and balloon septostomy in swine. Catheterization and Cardiovascular Interventions, 2006, 67, 637-643.	0.7	56
61	Percutaneous MR Imagingâ€“guided Transvascular Access of Mesenteric Venous System: Study in Swine Model. Radiology, 2006, 238, 113-118.	3.6	22
62	Real-Time Magnetic Resonance Imagingâ€“Guided Endovascular Recanalization of Chronic Total Arterial Occlusion in a Swine Model. Circulation, 2006, 113, 1101-1107.	1.6	62
63	Design of a Novel MRI Compatible Manipulator for Image Guided Prostate Interventions. IEEE Transactions on Biomedical Engineering, 2005, 52, 306-313.	2.5	263
64	Magnetic resonance image-guided trans-septal puncture in a swine heart. Journal of Magnetic Resonance Imaging, 2005, 21, 463-467.	1.9	56
65	Development of a 0.014-inch magnetic resonance imaging guidewire. Magnetic Resonance in Medicine, 2005, 53, 986-990.	1.9	18
66	Simultaneous radiofrequency (RF) heating and magnetic resonance (MR) thermal mapping using an intravascular MR imaging/RF heating system. Magnetic Resonance in Medicine, 2005, 54, 226-230.	1.9	13
67	An Interventional Magnetic Resonance Imaging Technique for the Molecular Characterization of Intraprostatic Dynamic Contrast Enhancement. Molecular Imaging, 2005, 4, 153535002005041.	0.7	14
68	MR-Guided Interventions for Prostate Cancer. Magnetic Resonance Imaging Clinics of North America, 2005, 13, 491-504.	0.6	28
69	Feridex-Labeled Mesenchymal Stem Cells: Cellular Differentiation and MR Assessment in a Canine Myocardial Infarction Model. Academic Radiology, 2005, 12, S2-S6.	1.3	33
70	Radiofrequency Safety for Interventional MRI Procedures1. Academic Radiology, 2005, 12, 1149-1157.	1.3	31
71	Real-Time Magnetic Resonance-Guided Endovascular Repair of Experimental Abdominal Aortic Aneurysm in Swine. Journal of the American College of Cardiology, 2005, 45, 2069-2077.	1.2	61
72	An interventional magnetic resonance imaging technique for the molecular characterization of intraprostatic dynamic contrast enhancement. Molecular Imaging, 2005, 4, 63-6.	0.7	7

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73	Magnetic resonance imaging-guided coronary interventions. Journal of Magnetic Resonance Imaging, 2004, 19, 734-749.	1.9	14
74	MR-trackable intramyocardial injection catheter. Magnetic Resonance in Medicine, 2004, 51, 1163-1172.	1.9	84
75	System for prostate brachytherapy and biopsy in a standard 1.5 T MRI scanner. Magnetic Resonance in Medicine, 2004, 52, 683-687.	1.9	123
76	Evaluation of internal MRI coils using ultimate intrinsic SNR. Magnetic Resonance in Medicine, 2004, 52, 640-649.	1.9	15
77	SSFP-based MR thermometry. Magnetic Resonance in Medicine, 2004, 52, 704-708.	1.9	28
78	Design of a novel MRI compatible manipulator for image guided prostate intervention. , 2004, , .		24
79	Internal coils in CMR. , 2004, , 375-389.		0
80	In Vivo Magnetic Resonance Imaging of Mesenchymal Stem Cells in Myocardial Infarction. Circulation, 2003, 107, 2290-2293.	1.6	696
81	MRI-guided coronary catheterization and PTCA: A feasibility study on a dog model. Magnetic Resonance in Medicine, 2003, 49, 258-263.	1.9	70
82	Phased-array MRI of canine prostate using endorectal and endourethral coils. Magnetic Resonance in Medicine, 2003, 49, 710-715.	1.9	8
83	Intravascular extended sensitivity (IVES) MRI antennas. Magnetic Resonance in Medicine, 2003, 50, 383-390.	1.9	36
84	Real-time imaging of two-dimensional cardiac strain using a harmonic phase magnetic resonance imaging (HARP-MRI) pulse sequence. Magnetic Resonance in Medicine, 2003, 50, 154-163.	1.9	70
85	System for MR Image-guided Prostate Interventions: Canine Study. Radiology, 2003, 228, 886-894.	3.6	78
86	Development of an intravascular heating source using an MR imaging guidewire. Journal of Magnetic Resonance Imaging, 2002, 16, 716-720.	1.9	18
87	Multiple field of view MR fluoroscopy. Magnetic Resonance in Medicine, 2002, 47, 53-60.	1.9	23
88	RF safety of wires in interventional MRI: Using a safety index. Magnetic Resonance in Medicine, 2002, 47, 187-193.	1.9	189
89	Multifunctional interventional devices for MRI: A combined electrophysiology/MRI catheter. Magnetic Resonance in Medicine, 2002, 47, 594-600.	1.9	69
90	RF heating due to conductive wires during MRI depends on the phase distribution of the transmit field. Magnetic Resonance in Medicine, 2002, 48, 1096-1098.	1.9	109

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91	Transrectal Prostate Biopsy Inside Closed MRI Scanner with Remote Actuation, under Real-Time Image Guidance. Lecture Notes in Computer Science, 2002, , 91-98.	1.0	38
92	Thermal effect of intravascular MR imaging using an MR imaging-guidewire: an in vivo laboratory and histopathological evaluation. Medical Science Monitor, 2002, 8, MT113-7.	0.5	8
93	Transesophageal magnetic resonance imaging of the aortic arch and descending thoracic aorta in patients with aortic atherosclerosis. Journal of the American College of Cardiology, 2001, 37, 2031-2035.	1.2	38
94	Imaging longitudinal cardiac strain on short-axis images using strain-encoded MRI. Magnetic Resonance in Medicine, 2001, 46, 324-334.	1.9	229
95	Endourethral MRI. Magnetic Resonance in Medicine, 2001, 45, 138-146.	1.9	38
96	In vivo measurement of pulsewave velocity in small vessels using intravascular MR. Magnetic Resonance in Medicine, 2001, 45, 53-60.	1.9	11
97	Possibilities of transesophageal MRI for assessment of aortic disease: a review. International Journal of Cardiovascular Imaging, 2001, 17, 179-185.	0.2	2
98	Magnetic Resonance Imaging Permits In Vivo Monitoring of Catheter-Based Vascular Gene Delivery. Circulation, 2001, 104, 1588-1590.	1.6	84
99	A Green's function approach to local rf heating in interventional MRI. Medical Physics, 2001, 28, 826-832.	1.6	70
100	Toward MRI-guided coronary catheterization: Visualization of guiding catheters, guidewires, and anatomy in real time. Journal of Magnetic Resonance Imaging, 2000, 12, 590-594.	1.9	76
101	RF Transmit Power Limit for the Barewire Loopless Catheter Antenna. Journal of Magnetic Resonance Imaging, 2000, 12, 86-91.	1.9	34
102	Cardiovascular MRI probes for the outside in and for the inside out. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2000, 11, 49-51.	1.1	3
103	Cardiovascular MRI probes for the outside in and for the inside out. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2000, 11, 49-51.	1.1	9
104	Real-time Projection MR Angiography: Feasibility Study. Radiology, 2000, 217, 290-295.	3.6	59
105	Intravascular MR Imaging-guided Balloon Angioplasty With an MR Imaging Guide Wire: Feasibility Study in Rabbits. Radiology, 2000, 217, 501-506.	3.6	68
106	A novel object-independent ?balanced? reference scan for echo-planar imaging. Journal of Magnetic Resonance Imaging, 1999, 9, 847-852.	1.9	28
107	Minimizing dead-periods in flow-encoded or -compensated pulse sequences while imaging in oblique planes. Journal of Magnetic Resonance Imaging, 1999, 10, 183-192.	1.9	8
108	Referenceless interleaved echo-planar imaging. Magnetic Resonance in Medicine, 1999, 41, 87-94.	1.9	55

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109	Multi-echo segmented k-space imaging: An optimized hybrid sequence for ultrafast cardiac imaging. <i>Magnetic Resonance in Medicine</i> , 1999, 41, 375-385.	1.9	74
110	Switchable multicoil array for MR micro-imaging of breast lesions. <i>Magnetic Resonance in Medicine</i> , 1999, 41, 569-574.	1.9	3
111	Transesophageal magnetic resonance imaging. <i>Magnetic Resonance in Medicine</i> , 1999, 41, 722-726.	1.9	38
112	Intravascular MR imaging and intravascular MR-guided interventions. <i>International Journal of Cardiovascular Interventions</i> , 1999, 2, 85-96.	0.5	13
113	Ultimate intrinsic signal-to-noise ratio in MRI. <i>Magnetic Resonance in Medicine</i> , 1998, 39, 462-473.	1.9	181
114	Catheter-tracking FOV MR fluoroscopy. <i>Magnetic Resonance in Medicine</i> , 1998, 40, 865-872.	1.9	73
115	Accuracy of arterial pulse-wave velocity measurement using MR. <i>Journal of Magnetic Resonance Imaging</i> , 1998, 8, 878-888.	1.9	69
116	Precision of myocardial contour estimation from tagged MR images with a "black-blood" technique. <i>Academic Radiology</i> , 1998, 5, 93-100.	1.3	24
117	Intravascular MR-monitored Balloon Angioplasty: An In Vivo Feasibility Study. <i>Journal of Vascular and Interventional Radiology</i> , 1998, 9, 953-959.	0.2	58
118	Advanced MR imaging techniques for evaluation of the heart and great vessels.. <i>Radiographics</i> , 1998, 18, 543-564.	1.4	42
119	Magnetic resonance guided radiofrequency ablation: Creation and visualization of cardiac lesions. <i>Lecture Notes in Computer Science</i> , 1998, , 189-196.	1.0	2
120	Segmented K-space cine breath-hold cardiovascular MR imaging: Part 1. Principles and technique.. <i>American Journal of Roentgenology</i> , 1997, 169, 395-400.	1.0	74
121	Intravascular Magnetic Resonance Imaging of Aortic Atherosclerotic Plaque Composition. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 1997, 17, 3626-3632.	1.1	79
122	Intravascular magnetic resonance imaging using a loopless catheter antenna. <i>Magnetic Resonance in Medicine</i> , 1997, 37, 112-118.	1.9	236
123	Quantification and reduction of ghosting artifacts in interleaved echo-planar imaging. <i>Magnetic Resonance in Medicine</i> , 1997, 38, 429-439.	1.9	56
124	Signal-to-noise measurements in magnitude images from NMR phased arrays. <i>Magnetic Resonance in Medicine</i> , 1997, 38, 852-857.	1.9	453
125	Intravascular quantification of human atherosclerotic burden: Magnetic resonance imaging versus ultrasound. <i>Journal of the American College of Cardiology</i> , 1996, 27, 17.	1.2	1
126	Human cardiac high-energy phosphate metabolite concentrations by 1D-resolved NMR spectroscopy. <i>Magnetic Resonance in Medicine</i> , 1996, 35, 664-670.	1.9	100

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127	High resolution intravascular MRI and MRS by using a catheter receiver coil. Magnetic Resonance in Medicine, 1996, 36, 596-605.	1.9	165
128	A magnetization-driven gradient echo pulse sequence for the study of myocardial perfusion. Magnetic Resonance in Medicine, 1995, 34, 276-282.	1.9	51
129	Regional Heterogeneity of Human Myocardial Infarcts Demonstrated by Contrast-Enhanced MRI. Circulation, 1995, 92, 1117-1125.	1.6	406
130	Optimization of tag thickness for measuring position with magnetic resonance imaging. IEEE Transactions on Medical Imaging, 1994, 13, 152-160.	5.4	88
131	Minimization of dead-periods in MRI pulse sequences for imaging oblique planes. Magnetic Resonance in Medicine, 1994, 32, 773-777.	1.9	26
132	Cardiac Tagging with Breath-Hold Cine MRI. Magnetic Resonance in Medicine, 1992, 28, 318-327.	1.9	192
133	A respiratory motion artifact reduction method in magnetic resonance imaging of the chest. IEEE Transactions on Medical Imaging, 1991, 10, 11-24.	5.4	24
134	Electrical impedance tomography of translationally uniform cylindrical objects with general cross-sectional boundaries. IEEE Transactions on Medical Imaging, 1990, 9, 49-59.	5.4	52
135	Using an MR imaging-guidewire as an intravascular local heating source: toward thermal enhancement of vascular gene transfection. , 0, , .		1
136	A hybrid method for 6-DOF tracking of MRI-compatible robotic interventional devices. , 0, , .		19